

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of monitoring nodes in a network comprising a network management system and a plurality of nodes, the network management system comprising a set of identifiers in a circular list of sets, the method comprising:

processing at a network management station comprising the network management system at least one node identified by an identifier in the set of a circular list of sets by sending a polling message from the network management station to the at least one node, at least a portion of the sets of the circular list of sets including two or more node identifiers;

advancing to the next set of the circular list of sets; and

receiving a polling response from the node at the network management system and updating a status of the node;

wherein processing comprises adding a copy of the identifier to a subsequent set of the circular list of sets that will be processed when a response from the node identified by the identifier is expected.

Claim 2 (canceled).

Claim 3 (previously presented): The method of claim 1 further comprising moving the identifier to a subsequent set of the circular list of sets.

Claim 4 (original): The method of claim 3, wherein the subsequent set is the set that will be processed at the next timing interval of the node identified by the identifier.

Claims 5-6 (canceled).

Claim 7 (original): The method of claim 1, further comprising processing polling responses.

Claim 8 (previously presented): The method of claim 1, wherein the selecting and advancing are performed at periodic intervals.

Claim 9 (currently amended): A system, comprising:

a processor; and

a memory storing a network management system for execution by the processor for monitoring nodes in a network including a plurality of nodes, the network management system comprising:

computer code that processes at least one node identified by an identifier in a set of a circular list of sets, at least a portion of the sets of the circular list of sets including two or more identifiers of nodes;

computer code that adds a copy of the identifier to a subsequent set of the circular list of sets that will be processed when a response from the node identified by the identifier is expected; and

computer code that advances to the next set of the circular list of sets;

wherein code that processes comprises code that sends a polling message to said at least one node, receives a polling response from the node, and updates a status of the node.

Claim 10 (currently amended): A system for monitoring nodes in a network including a plurality of nodes, comprising:

means for processing at least one node identified by an identifier in a set of a circular list of sets, at least a portion of the sets of the circular list of sets including two or more identifiers of nodes;

means for adding a copy of the identifier to a subsequent set of the circular list of sets that will be processed when a response from the node identified by the identifier is expected; and

means for advancing to the next set of the circular list of sets;

wherein means for processing comprises means for sending a polling message to said at least one node, receiving a polling response from the node, and updating a status of the node; and

wherein said means for processing, means for adding, and means for advancing comprise a hardware means or a software means executed by a hardware means.

Claim 11 (currently amended): A method of monitoring nodes in a network comprising a network management system and a plurality of nodes, comprising:

receiving a signal from a timer at periodic intervals;

processing polling responses at the a network management station comprising the network management system;

processing at least one node identified by an identifier in a set of a circular list of sets by sending a polling message to the at least one node from the network

management station and adding a copy of the identifier to a subsequent set of the circular list of sets that will be processed when a response from the node identified by the identifier is expected, at least a portion of the sets of the circular list of sets including two or more identifiers of nodes;

advancing to the next set of the circular list of sets; and

receiving a polling response from the node at the network management system and updating a status of the node;

wherein each of said identifiers comprises a pointer into a table stored in said network management station.

Claim 12 (original): The method of claim 11, wherein the processing the at least one node includes moving the identifier to a subsequent set of the circular list of sets.

Claim 13 (original): The method of claim 12, wherein the subsequent set is the set that will be processed at the next timing interval of the node identified by the identifier.

Claims 14-15 (canceled).

Claim 16 (currently amended): A system, comprising:

a processor; and

a memory storing a network management system for execution by the processor for monitoring nodes in a network including a plurality of nodes, the network management system comprising:

computer code for a timer that generates a signal at periodic intervals;

computer code for a poller that processes polling responses; processes at least one node identified by an identifier in a set of a circular list of sets by sending a polling message to the at least one node, receiving a polling response from the node, and updating a status of the node; ~~and adding~~ adds a copy of the identifier to a subsequent set of the circular list of sets that will be processed when a response from the node identified by the identifier is expected, at least a portion of the sets of the circular list of sets including two or more identifiers of nodes; and advances to the next set of the circular list of sets.

Claim 17 (currently amended): A system for monitoring nodes in a network including a plurality of nodes, comprising:

means for receiving a signal from a timer at periodic intervals;

means for processing polling responses;

means for processing at least one node identified by an identifier in a set of a circular list of sets by sending a polling message to the at least one node and adding a copy of the identifier to a subsequent set of the circular list of sets that will be processed when a response from the node identified by the identifier is expected, at least a portion of the sets of the circular list of sets including two or more identifiers of nodes; ~~and~~

means for advancing to the next set of the circular list of sets; and

means for receiving a polling response from the node and updating a status of the node;

wherein said means for processing, means for advancing, and means for receiving comprise a hardware means or a software means executed by a hardware means.

Claim 18 (previously presented): The method of claim 11 wherein said table comprises IP addresses of said plurality of nodes in the network and a transmission count representing the number of polling messages sent to each of said nodes.

Claim 19 (previously presented): The method of claim 11 wherein processing polling responses comprises removing the polling response from a buffer.

Claim 20 (previously presented): The method of claim 11 wherein processing polling responses comprises updating a transmission count for the node sending the polling response to indicate the number of polling responses that have been received from the node.

Claim 21 (previously presented): The method of claim 11 further comprising creating a copy of the pointer in the circular list when a response from a polling message is expected to be received.

Claim 22 (previously presented): The method of claim 1 wherein processing at least one node comprises retrieving an entry for the node in a table.

Claim 23 (previously presented): The method of claim 22 wherein the table comprises information on the nodes identified by the identifiers including IP addresses of the nodes.

Claim 24 (previously presented): The system of claim 9 further comprising code that moves the identifier to a subsequent set of the circular list of sets.

Claim 25 (previously presented): The system of claim 16 wherein said processing and advancing are performed at periodic intervals.